CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 92-007

WASTE DISCHARGE REQUIREMENTS FOR:

CENTRAL CONTRA COSTA SANITARY DISTRICT
BOLLINGER CANYON LEACHFIELD,
CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. The Central Contra Costa Sanitary District (hereinafter called the Discharger) owns and operates a subsurface percolation leachline for septic tank effluent in Bollinger Canyon. The leachline runs for approximately one mile along Bollinger Canyon Road and Bollinger Creek in the unincorporated, unsewered area of Contra Costa County. The leachline is located about two miles southwest of Danville, and about two miles from the intersection of Bollinger Canyon Road and Crow Canyon Road.

2. The leachline was constructed during the mid 1960's, and was installed as a limited sewer system to serve an assessment district consisting of parcels of land owned by Contra Costa County, and one parcel of land owned MB Associates (currently owned by Tracor Aerospace (hereinafter called Tracor)). Wastewater discharged to the leachline is effluent from septic tanks located on the various properties. Primary treatment of the wastewater occurs in the septic tank, which operates primarily under anaerobic conditions. The leachfield provides most of the wastewater treatment by physical filtration, biological decomposition and chemical reactions.

3. The leachline consists of four main percolation areas separated by lengths of solid pipe. Manholes are located every few hundred feet and are numbered sequentially from south to north, with Manhole 13 located at the northern end of the leachline. Effluent entering the line at a manhole connection point discharges to a 4-inch perforated leachline segment between two manholes. As the leachline segment reaches capacity, effluent carries over a weir in the manhole and is transported to the next downstream manhole. Attachment A is a map of the leachline and surrounding area.

4. In 1967 when the leachline was constructed, MB Associates was connected to the northernmost position of the line at Manhole No. 13, and two county parcels were connected approximately 2000 feet and 2500 feet downstream at Manhole Nos. 8 and 7 respectively. The original as-built design capacity of the leachfield was approximately 10,590 gallons per day. This was to accommodate the an approximate flow of 1,250 gallons per day from MB Associates, and 7,500 gallons per day from the California Department of Forestry and Fire Protection (CDF).

5. Two portions of the leachline are not currently being used for discharge of wastewater, and a third portion is not desired to be used and may be abandoned and sealed off in the near future. The southernmost 500 feet (approximately) between Manholes 1 and 2 is sealed off from flow and the percolation area is no longer active. The portion of the leachline located between Manholes 3 and 6 is not desired to be used due to its close proximity to single family homes which utilize individual on-site septic systems for wastewater disposal, and the need to minimize potential cumulative impacts. The upper portion of the leachline located between Manholes 10 and 13 is not currently used due to the potential for aggravation of a groundwater pollution problem in the area (see Finding 11). This upper portion may be utilized in the future as authorized by the Executive Officer, based upon a demonstration that the discharge of wastewater will not aggravate the groundwater pollution problem.

6. Current Regional Board policy (implemented after construction of the Bollinger Canyon Leachline) requires that leachfields be constructed with a 100 foot setback from streams, and a 50 foot setback from drainageways. The Bollinger Canyon Leachline meets these setback requirements for the majority of the length of the line; however, there are some locations where the requirements are not met. The Discharger will monitor these areas in order to determine if the limited setback poses a threat to water quality.

7. For the following reasons, the capacity of the leachline is reduced from the original as-built capacity: (1) several portions of the leachline are not in use or desired to be in use; and, (2) the soils beneath the leachline may have a reduced capacity to treat wastewater due to usage for 25 years.

8. The following parties discharged to the leachfield at Manholes 7 and 8 for some period of time since 1967: County Deputy Training, County Boy's Camp, California Conservation Corps, and, the California Department of Forestry.

9. There are currently two users of the leachline, the California Department of Forestry and Fire Protection (at Manholes 7 and 8), and one single family residence on the east side of Bollinger Canyon Road (between Manholes 9 and 10). Until late 1989, Tracor was also using the line at the original MB Associates connection. Tracor has ceased discharging wastewater to the leachline (as of May, 1990) and currently hauls wastewater to a Central Contra Costa Sanitary District manhole (see Finding 11).

10. The leachline has been regulated by the Board's Resolution No. 797, adopted on November 17, 1966. Prior to adoption of Resolution No. 797, wastewater was discharged into a diked pond, with disposal of its contents by percolation and land irrigation during the summertime, and possible discharge to a tributary of Bollinger Creek at other times. This practice was regulated by the Regional Board's Resolution No. 154. Discharge to the leachline from the single family residence was authorized by the Executive Officer by letter dated June 5, 1986.

11. During field investigations in late 1989, low concentrations of volatile organic compounds were found in groundwater samples from monitoring wells

located in the vicinity of Manholes 8, 12, and 13. Trichloroethene (TCE) has also been detected at levels below the drinking water standards in a private drinking water well located near the leachline. Further evaluation of the impacts on groundwater were required by Cleanup and Abatement Order No. 90-141 (CAO), which was issued to Tracor and the Central Contra Costa Sanitary District on October 19, 1990. Tracor was named on the CAO because they are the current property owner of the site where the solvents may have originated, and acquired the subsidiary company who originally used the leachline. The Central Contra Costa Sanitary District was named on the CAO because they own and operate the leachline, and operation of the leachline may have contributed to the presence of solvents in the groundwater.

12. Because the groundwater investigation has been conducted jointly by the Discharger and Tracor, these Waste Discharge Requirements do not address remedial measures for the groundwater pollution problems in the vicinity of the leachline. Followup on the issues raised in the CAO will be addressed in a separate process. The scope of these Waste Discharge Requirements is limited to permitting the continued operation, maintenance, and monitoring of the leachline by the Discharger.

13. The Board's Resolution No. 78-14, Policy on Discrete Sewerage Facilities, states in part:

    "This Regional Board will apply the following principles to all wastewater discharges:

    1. The system must be designed, constructed, and installed so as to be capable of preventing pollution or contamination of the waters of the State or creating nuisance for the life of the development.

    2. The system must be operated, maintained and monitored so as to continually prevent pollution or contamination of the waters of the State and the creation of a nuisance.

    3. The responsibility for both of the above must be clearly and legally assumed by a public entity with the financial and legal capability to assure that the system provides protection to the quality of the waters of the State for the life of the development."

14. The Central Contra Costa County Sanitary District is the public entity responsible for the operation and maintenance of the Bollinger Canyon leachfield.

15. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986, and the State Water Resources Control Board approved the revised Basin Plan on May 21, 1987. The requirements of this Order are consistent with the revised Basin Plan.

16. Bollinger Creek is tributary to San Ramon Creek, which is tributary to Walnut Creek.

17. The Basin Plan identifies existing and potential beneficial uses of, and water quality objectives for, the surface waters and ground waters in the San Francisco Bay Basin Region.

18. The existing or potential beneficial uses of Walnut Creek and its tributaries include:

    a. Water Contact Recreation
    b. Non-Contact Water Recreation
    c. Warm Fresh Water Habitat
    d. Cold Fresh Water Habitat
    e. Wildlife Habitat
    f. Fish Migration
    g. Fish Spawning

19. The existing or potential beneficial uses of ground waters in the Bollinger Canyon area include:

    a. Domestic Water Supply
    b. Agricultural Supply
    c. Industrial Supply

20. This project involves the operation of an existing facility with no expansion of use beyond that originally permitted, and as such is exempt from the provisions of the California Environmental Quality Act (CEQA) in accordance with Title 14, Chapter 3, Section 15301 of the California Code of Regulations.

21. The Board has notified the Central Contra Costa Sanitary District, and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge described above, and has provided them with an opportunity for a public hearing and an opportunity to submit written views and recommendations.

22. The Board, in a public hearing, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger, pursuant to the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. Discharge of wastewater shall not create a pollution, contamination or nuisance as defined by Section 13050 of the California Water Code.

2. The discharge of toxic substances, not including domestic sanitary wastewater, into the leachfield is prohibited.

3. Wastewater discharged to the leachfield shall remain below ground at all times, and shall not be allowed to leach, seep, or flow into surface waters of the State.

4. The discharge of wastewater to the leachfield shall not adversely impact the existing or potential beneficial uses of the surface or ground water in the vicinity of the site. The pollution or contamination of surface or ground water is prohibited.

5. The discharge of wastewater shall not cause the following conditions to exist in surface waters in the vicinity of the leachline:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam.

   b. Bottom deposits or aquatic growth.

   c. Alteration of temperature, turbidity, or apparent color beyond natural background levels.

   d. Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

B. SPECIFICATIONS

1. The leachfield shall be adequately protected from erosions, washout, and flooding form a rainfall event having a predicted frequency of 10 years.

2. Septic tanks discharging to the leachline shall be pumped at regular intervals to ensure that maximum treatment efficiency is maintained.

3. Wastewater shall only be discharged to the leachline between Manholes 6A and 9, and the wastewater flows shall not exceed approximately 900 gallons per day, unless the Executive Officer has authorized the increased discharge and/or use of other areas of the leachline based upon a demonstration that the increased flows will not aggravate the existing groundwater pollution problem. In addition, if an increase in flows is to be considered, the Discharger must submit a report which demonstrates that the leachline has adequate capacity for the increased flow.

C. PROVISIONS

1. The Discharger shall comply with all sections of this Order immediately upon adoption.

2. The Discharger shall comply with the Self-Monitoring Program for this Order as adopted by the Board and as may be amended by the Executive Officer.

3. The Discharger shall maintain in good working order and operate, as efficiently as possible, any facility or control system installed or as modified to achieve compliance with this Order.

4. The Discharger shall permit the Board or its authorized representatives, in accordance with Section 13267(c) of the California Water Code:

   a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;

b. Access to and copy of, at reasonable times, any records that must be kept under the conditions of this Order;

c. Inspection, at reasonable times, of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; or

d. To photograph, sample or monitor, at reasonable times, for the purpose of assuring compliance with this Order.

5. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.

6. The Discharger shall file with the Board a Report of Waste Discharge at least 180 days before making any material change in the character, location, or volume of the discharge, except for emergency conditions in which case the Board shall be notified.

7. After notice and opportunity for a hearing, this Order may be terminated or modified for cause including, but not limited to:

   a. Violation of any term or condition of this Order;

   b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;

   c. A change in any condition that requires either a temporary or permanent change in the authorized treatment or discharge;

   d. Endangerment to public health or environment that can only be regulated to acceptable levels by Order modification or termination.

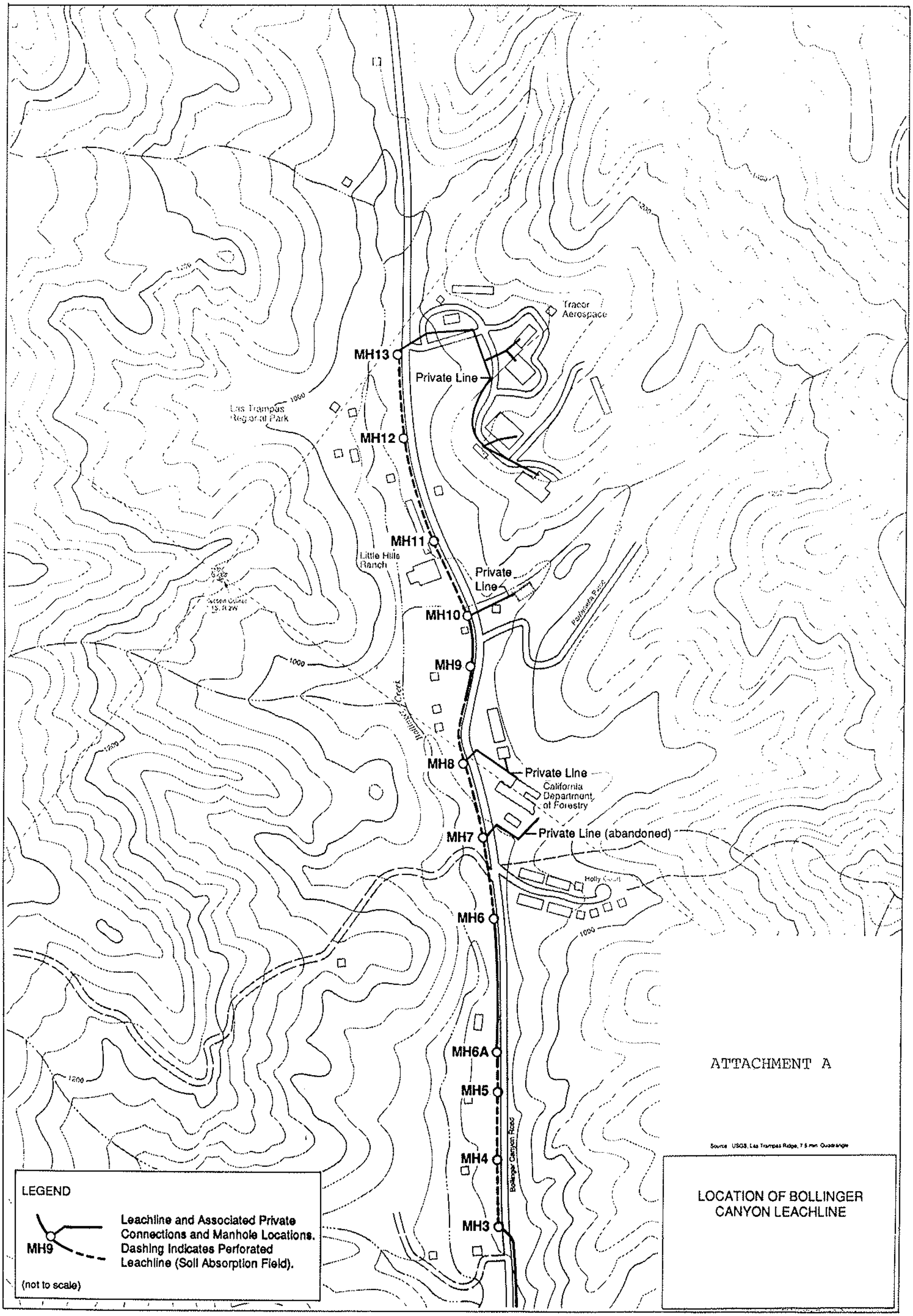
8. The waste discharge requirements prescribed by this Order supersede the requirements prescribed by the Board's Resolution No. 797.

9. This Order is subject to Board review and updating, as necessary to comply with changing State and Federal laws, regulations, policies, or guidelines; changes in this Regional Board's Basin Plan; or changes in the discharge characteristics. This Order will be reviewed periodically to determine the need for updating.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on January 15, 1992.

Steven R. Ritchie
Executive Officer

Attachments:
Site Map
Self-Monitoring Program


MH13
Private Line
Tracor Aerospace
Las Trampas Regional Park
1000
1200
MH12
MH11
Little Hills Ranch
Private Line
MH10
MH9
MH8
Private Line
California Department of Forestry
MH7
Private Line (abandoned)
MH6
MH6A
MH5
MH4
MH3
Bollinger Canyon Road
LEGEND
MH9
Leachline and Associated Private Connections and Manhole Locations. Dashing Indicates Perforated Leachline (Soil Absorption Field).
(not to scale)
ATTACHMENT A
Source: USGS, Las Trampas Ridge, 7.5 min. Quadrangle
LOCATION OF BOLLINGER CANYON LEACHLINE

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CENTRAL CONTRA COSTA SANITARY DISTRICT

BOLLINGER CANYON LEACHFIELD

CONTRA COSTA COUNTY

ORDER 92-007

SELF MONITORING PROGRAM
CENTRAL CONTRA COSTA SANITARY DISTRICT
BOLLINGER CANYON LEACHFIELD

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principle purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board; and

2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to Code of Federal Regulations Title 40, Section 136 (40 CFR S136), or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS), or a laboratory waived by the Executive Officer from obtaining a DOHS certification for these analyses.

The director of the laboratory whose name appears on the certification, or his/her laboratory supervisor who is directly responsible for the analytical work performed shall supervise all analytical work including appropriate quality assurance/quality control procedures in his/her laboratory and shall sign all reports of such work submitted to the Regional Board. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy or measurements.

III. DEFINITION OF TERMS

A. A grab sample is defined as an individual sample collection in a short period of time not exceeding 15 minutes. Grab samples are used primarily in determining compliance with daily maximum limits and instantaneous maximum limits. Grab samples represent only the condition that exists at the time the sample is collected.

B. Standard Observations

1. Surface Waters

a. Evidence of any floating or suspended materials of waste origin. If present, indicate apparent or known source and extent of area affected.

b. Evidence of any unusual discoloration or turbidity. If present, indicate apparent or known source, description of color, and extent of area affected.

2. Leachfield

a. Evidence of saturated surface soil conditions (septic tank effluent on the ground surface) or sewage odors in the ambient air. (Show affected area on a sketch).

b. Evidence of wastewater surfacing, leaching, seeping, or otherwise escaping from subsurface leachfield. (Show affected area on a sketch).

c. If seepage is observed on creek embankments in areas where setback of leachline from Bollinger Creek is less than 100 feet, the seepage shall be sampled and analyzed for coliform bacteria.

d. If possible, evidence of further erosion of creek embankment shall be observed and reported for areas where setback of leachline from Bollinger Creek is less than 100 feet, with particular note to potential impacts of erosion on the leachline.

IV. DESCRIPTION OF OBSERVATION/SAMPLING STATIONS

Station	Description
A. SURFACE WATERS	
C-1	At a point in Bollinger Creek immediately upstream of Manhole 9.
C-2	At a point in Bollinger Creek immediately downstream of Manhole 6A.
B. LAND OBSERVATIONS	
L-2A	Area that overlies the percolation area between Manholes 8 and 9.
L-2B	Face of the creek embankment located between Manholes 8 and 9.
L-5A	Area that overlies the percolation area between Manholes 6A and 7.
L-5B	Face of the creek embankment located between Manholes 6A and 7.

NOTE: A sketch showing the locations of the sampling stations described above shall accompany the first monitoring report, and subsequent reports when station locations are changed or a violation or threatened violation is reported.

V. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

The Discharger is required to perform observations, sampling, measurements and analyses according to the schedule given in Table I (Attachment A).

VI. REPORTS TO BE FILED WITH THE REGIONAL BOARD

A. Self-Monitoring Reports

Written reports for each quarter shall be submitted to this Regional Board's office by the fifteenth day of January, April, July, and October. The reports shall consist of the following:

1. Letter of Transmittal

A letter transmitting the self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.

The transmittal letter shall contain a statement by the Discharger, or the Discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

2. Results of Analyses and Observations

Tabulations of the results from each required analysis and/or observations specified in Table I (Attachment A) by date, time, type of sample, and sample station.

B. Report of Permit Violation

In the event the Discharger violates or threatens to violate any condition of the waste discharge requirements due to:

a. Maintenance work, power failure, or breakdown of wastewater transport or treatment equipment;

b. Accidents caused by human error or negligence; or

c. Other causes such as acts of nature,

the Discharger shall notify the Regional Board office by telephone as soon as the Discharger or the Discharger's agents have knowledge of the incident.

Written confirmation of this notification shall be submitted within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 92-007.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

Steven R. Ritchie
Executive Officer

Effective Date 1/15/92

Attachments:

A. Table I - Schedule for Sampling, Measurements and Analyses
B. Site Map

ATTACHMENT A

BOLLINGER CANYON LEACHFIELD - SELF MONITORING PROGRAM

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	All C		All L									
TYPE OF SAMPLE	O/G *		O									
Coliform, Total & Fecal (MPN/100 ml)	M (1)											
All Applicable Standard Observations	M		M									

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
O = observation

TYPES OF STATIONS

C = Surface water
L = Land observations

FREQUENCY OF SAMPLING

M = monthly

* observations for "All Applicable Standard Observations", and grab sample for coliform testing.

1. Sample if seepage is present.